

Subp1
cont
~~hook-shaped hard mask being a polysilicon film, tungsten film,
or other electroconductive film, or a silicon nitride film or
other insulating film.~~

AddA2
~~5. The manufacturing method of a semiconductor IC device
described in Claim 1 or 4, characterized by the fact that the
aforementioned connecting holes are in contact with the lower
electrodes in the capacitors of the memory cells, with the
capacitors being set for storing information on the bit lines.~~

INS13
~~ABSTRACT~~

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~~To provide a manufacturing method of the semiconductor IC
device having fine-structure connecting holes or trenches with
high dimensional precision. There is the following step of the
operation: a hook-shaped hard mask made of polysilicon film 18
and polysilicon film 20a is formed on the surface of silica film
17 for forming connecting holes 21 accommodating plugs that
perform an electrical connection with the lower portion of the
lower~~

electrode of the capacitor in the COB-type memory cells, with the hook-shaped hard mask being used as an etching mask in selective etching so as to form connecting holes 21 on silica film 17 and silica film 15 below it.

[Selected FIG.] FIG. 14

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